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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,366	09/27/2006	Limei Lu	13779-71	4681
45473	7590	03/19/2010	EXAMINER	
BRINKS, HOFER, GILSON & LIONE P.O. BOX 1340 MORRISVILLE, NC 27560			TRAN, THAO T	
ART UNIT	PAPER NUMBER			
	1794			
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03/19/2010	PAPER			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/594,366	Applicant(s) LU ET AL.
	Examiner Thao T. Tran	Art Unit 1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 1-26 is/are rejected.
- 7) Claim(s) ____ is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08) _____
 Paper No(s)/Mail Date 9/27/06
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____
- 5) Notice of Informal Patent Application
- 6) Other: _____

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-18, 23-26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 7,439,280. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patented claims disclose all the limitations as recited in the instant claims. However, the scope of the patented claims is narrower than that of the instant claims, rendering them obvious over each other.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-13, 19-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Diehr et al. (US Pat. 3,870,665).

Diehr discloses a composite made by mixing a lignocellulosic material with a polyisocyanate binder and compression molding the mixture at high temperature (see abstract). Agents against fungi and insects are also used in the mixture (see col. 2, ln. 31-34; Example 4).

At least Example 2 shows mixing a diisocyanate with wood chips in a ratio of 105g:1,900g (5.2% and 94.5%), pressure molding the mixture at a temperature of 170°C and 25-5kp/cm² to form a chipboard of 10 mm (0.39 in) thick (see Example 2).

The isocyanate can be diphenylmethane diisocyanate and tolylene diisocyanate (see col. 3, ln. 66-67).

Example 4 shows the use of 10% fungicide in 3,400g of straw chips, which reads on the instantly claimed range.

At least Example 3 shows multiple layers of the chipboard.

5. Claims 1-5, 7-13, 16, 19-21, 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Scholl et al. (US Pat. 4,478,738) or Phanopoulos et al. (US Pat. 5,750,201).

Scholl discloses the use of a polyisocyanate binder in the production of an article containing lignocellulosic material by hot pressing (see col. 1, ln. 11-16). Example 10 shows the

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use of 3,000 parts of wood chips, 60 parts of isocyanate, and 20 parts of 1% of an insecticide (giving . Example 11 shows the use of 2,000 parts of wood chips, 110 parts of isocyanate, and 17 parts of potassium hydrogen fluoride (a fungicide). The polyisocyanates used include diphenylmethane diisocyanate and tolylene diisocyanate (see col. 3, ln. 62-65).

Phanopoulos discloses a process for making an article by hot pressing a combination of lignocellulosic part, a polyisocyanate composition, and a lignin solvent (see paragraph bridging col. 3-4). The weight ratio of polyisocyanate/lignocellulosic material is 0.3:99.7 to 16:84 (see col. 4, ln. 32-37). The lignin solvents used include methyl morpholine and acetone (see col. 1, ln. 57-59). The solvent is used from 0.5-2% based on polyisocyanate (see col. 2, ln. 4-7). Additives such as fungicides are also used in the polyisocyanate composition (see col. 3, ln. 61-63). Note that methyl morpholine is used as a lignin solvent, but it is also a fungicide. Example 3 shows the layer can be 3 mm thick.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. T. T./
Primary Examiner, Art Unit 1794

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